LAKE ODESSA

HABITAT REHABILITATION AND ENHANCEMENT PROJECT

Pools 17-18 Upper Mississippi River Miles 435.0 - 440.0

> Louisa County, Iowa Rock Island District



RESOURCE PROBLEM:

While Lake Odessa has traditionally had high fall duck and geese populations and significant duck production, the existing water control structures, high amount of seepage due to sandy soil, and overall complex size limit water level management with regard to drawdown, excess water release, and fall reflooding. Breaches of existing levees have resulted in frequent losses of emergent aquatic vegetation used by migratory waterfowl. Sedimentation from frequent levee breaks and overtopping flood events has increased the extent of shallow water habitat. Fish winterkills and reduced circulation of well-oxygenated water are being experienced.

PROJECT OUTPUTS:

Water level management capabilities, benefiting fish and waterfowl, would be improved. Sedimentation of this backwater lake complex would be reduced. Other habitat betterments resulting from the full implementation of this project would include improved distribution of oxygenated water; creation of new habitat and habitat diversification; and increased natural resource management flexibility.

PROJECT FEATURES:

- Rehabilitate to reliable and maintainable standards the levee system that protects the Lake Odessa complex;
- Construct a spillway to protect levee;
- * Create new moist soil management areas;
- Dredge a deep holes/channel to enhance fishery protection;
- * Create a natural fish hatchery area; and
- * Establish hardwood trees through plantings.

FINANCIAL DATA:

General design costs are estimated at \$785,000, and construction costs are estimated at \$4,605,000. Annual costs for operation, maintenance, and repair will be the responsibility of the Iowa Department of Natural Resources and the U.S. Fish and Wildlife Service.

STATUS:

General design work was initiated in FY 00.

